

**IN THE UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF MISSOURI  
EASTERN DIVISION**

<b>GINA TORRES <i>et al.</i>,</b>	)	
	)	
<b>Plaintiffs,</b>	)	<b>Case No. 4:19-cv-1525-DDN</b>
	)	
<b>v.</b>	)	
	)	
<b>CITY OF ST. LOUIS <i>et al.</i>,</b>	)	
	)	
<b>Defendants.</b>	)	

**REPLY IN SUPPORT OF DEFENDANTS’ MOTION TO EXCLUDE TESTIMONY  
OF L. SAMUEL ANDREWS**

COME NOW Defendants, Lance Coats, Glennon P. Frigerio, Joshua D. Becherer, Nicholas J. Manasco, Ronald Allen Jr., John C. Jones, Mark S. Seper, Jon B. Long, Tim Boyce, Benjamin Lacy, and the City of St. Louis (“Defendants”), by and through their attorney Michael Garvin, City Counselor for the City of St. Louis, and in reply to Plaintiffs’ Memorandum in Opposition to Defendants’ Motion to Exclude Testimony of L. Samuel Andrews (“Memorandum in Opposition”) (doc. 153-1), state as follows:

**INTRODUCTION**

In their 23-page Memorandum in Opposition, Plaintiffs fail to carry their burden to show that L. Samuel Andrews’ possesses any relevant experience, training or knowledge that would qualify him to analyze a complex shooting scene involving more than 100 pieces of ballistics evidence and extensive ballistics damage.

In their Memorandum, Plaintiffs essentially argue that this Court should permit Andrews to provide expert testimony on the topic of crime scene reconstruction because he has extensive experience shooting and some experience manufacturing guns. While Mr. Andrews might be a competent armorer and or a skilled sniper who has earned money training others how to fire

guns, this does not establish that he possesses the requisite knowledge and skill to perform a shooting scene reconstruction. This Court should find that Andrews is unqualified to perform a forensic analysis of a shooting scene and the methods and principles he relied upon are fundamentally unreliable.

**1. Andrews is completely unqualified as an expert in the field of shooting scene reconstruction to render the opinion that no AK-47 was fired at the time of the execution of the search warrant.**

In their Response, Plaintiffs do not really dispute that Andrews lacks any formal education or training that would equip him to analyze a crime scene or perform a shooting scene reconstruction. In fact, the closest that Plaintiffs come to identifying relevant training is citing “a subsection” of a “sniper training course” that Andrews took in the mid-1990s at a facility called Gunsite, a firearms safety and defensive tactics training facility in Arizona. Doc. 153-1, p 29. Although Plaintiffs attempt to characterize this “subsection” in “external and terminal ballistics” as training “in crime scene investigation,” (doc. 153-1 p. 4), Andrews’ testimony does not support that claim. According to Andrews, this sniper training was taught by a three-time World Sniper Champion who also worked as a SWAT officer. Doc. 136-5, p. 30. There is no indication that the instructor of this sniper training course was himself credentialed to perform a shooting scene reconstruction and no indication that this small subsection of a single course taken over 20 years ago involved training in crime scene reconstruction at all. Indeed, a review of Gunsite’s website confirms that it does not purport to offer instruction on crime scene investigation or shooting scene reconstruction.<sup>1</sup>

In an apparent recognition that Andrews does lack relevant training and certifications, Plaintiffs next argue that a ballistics expert need not “be academically trained” and instead can

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<sup>1</sup> On its website Gunsite states that it “offers firearm training to elite military personnel, law enforcement officers and free citizens of the US.” <https://www.gunsite.com>

be “qualified by specialized knowledge and experience.” Doc. 153-1, p. 9. While FRE 702 does recognize that an expert can be qualified by relevant knowledge, skill or experience, that is not the case with Andrews with regard to the fields of shooting scene reconstruction and tool mark identification. Andrews’ curriculum vitae and deposition testimony established that he also lacks any practical experience performing crime scene investigations, shooting scene reconstruction or tool mark identification. Doc. 136-2; Doc. 136-5, pp. 149-150. He has not worked in a police department crime laboratory, has not investigated shootings as a law enforcement agent and has never worked under the tutelage of a certified crime scene investigator or a certified tool mark examiner. Doc. 136-2; Doc. 136-5, pp. 84, 146.

In their Response, Plaintiffs detail Andrews’ firearms training in an attempt to support their claim that Andrews is experienced “in the field of ballistics.” Doc. 153-1, p. 4. They cite training “in specific weapons systems on behalf of a government contracting company” and Andrews’ handguns and weapons systems training at Gunsite in Arizona. *Id.* at p. 4. They also cite to unidentified “contract work” Andrews claims to have performed in 1986 for the federal government. *Id.* Whether or not this “contract work” provided Andrews with any relevant training or experience in the “field of ballistics” is entirely unclear. In fact, when defense counsel attempted to question Andrews about the nature of this “contract work” he refused to answer all questions, citing non-disclosure agreements. Doc. 136-5, p. 17-20. Plaintiffs have objected to, in response to Defendants’ requests for production, producing copies of these purported non-disclosure agreements, stating that they do not have custody or control of them, that Andrews did not retain copies, and Andrews could not in any event produce them in the absence of a court order. To the extent that Plaintiffs now seek to rely upon unspecified government “contract

work” to show Andrews is an expert in the field of ballistics, this Court should find that Plaintiffs have provided the Court with no information from which it could draw that conclusion.

Plaintiffs go on to cite additional firearm and sniper training and reference “contract engineering work” Andrews purportedly performed at Powell River Laboratories “developing projectiles and weapons systems.” *Id.* at p. 5. They argue he is qualified to perform a shooting scene reconstruction because he performed research and development “for external and terminal ballistics and firearm barrel development.” *Id.* Plaintiffs, however, fail to show any nexus between firearms product development and crime scene examination or shooting scene reconstruction. They simply ask the Court to blindly accept that Andrews’ work with and around firearms and ammunition in that context qualifies him to draw conclusions about his observations at a crime scene. It does not.

Next, Plaintiffs place great emphasis on Andrews’ claim that he was “repeatedly” hired by St. Louis Police Department to provide sniper training to its SWAT team. *Id.* at 8. Once again, Plaintiffs fail to explain how experience providing sniper training in anyway prepares Andrews to conduct a shooting scene investigation and forensic reconstruction. Plaintiffs do not claim that the City SWAT team members perform crime scene investigations or shooting reconstructions, and indeed, they do not. SWAT team members are not involved in documenting or analyzing physical evidence at shooting scenes, and they do not perform analyses of ballistics evidence in the City’s crime laboratory. Plaintiffs do not attempt to explain the relevance of sniper training to crime scene investigation or shooting scene reconstruction because there is none.

Plaintiff also cites *Fletcher v. Beightler*, 2011 WL 741294, at \*7 (N.D. Ohio Feb. 24, 2011), in support of their claim that Andrews’ “experience with firearms” qualifies him to

reconstruct a shooting scene. In *Fletcher*, an Ohio district found under Ohio Evidence Rule 702 that a police officer was properly qualified as an expert given his education, training, and experience with firearms over his long career as a law enforcement officer. *Id.* at \*7. There, the officer permitted to testify in that case had education, training and experience working with firearms *in the context of his profession as a law enforcement officer. Id.* Here, by contrast, Andrews' experience with firearms is in the context of sniper training and manufacturing barrels. Unlike a law enforcement officer, he has had no occasion, in a professional capacity or otherwise, to investigate a shooting scene, and Andrews has no professional experience documenting and examining evidence at a crime scene or working in a crime laboratory. Plaintiffs identify no case in which a Court has recognized, as a crime scene construction expert, a person with no law enforcement or investigatory experience but who merely knows a lot about shooting guns.

Accordingly, this Court should find that Andrews is unqualified to testify as an expert pursuant to FRE 702. Andrew's affidavit should be struck and he should not be permitted to testify in this matter.

**2. Andrews' opinion that no AK-47 was fired should be struck because his methods and principles are unreliable and lack scientific validity.**

This Court should further strike Andrews' testimony because his methodologies and techniques lack scientific validity and are unreliable.

In *Daubert v. Merrell Dow Pharms.*, 509 U.S. 579, 589, 469 (1993), the Supreme Court set out a four-part test for determining whether a purported expert's technique has scientific validity. Factors courts may consider in conducting this analysis include:

[W]hether a theory or technique can be and has been tested;  
whether it has been subjected to peer review and publication;  
whether, in respect to a particular technique, there is a high known

or potential rate of error and whether there are standards controlling the technique's operation; and whether the theory or technique enjoys general acceptance within a relevant scientific community.

*Singleton v. Ark. Hous. Auths. Prop. & Cas. Self-Insured Fund, Inc.*, 934 F.3d 830, 838 (8th Cir. 2019) citing *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 149-50, (1999) (internal citations omitted) (quoting *Daubert*, 509 U.S. at 592-94). Under *Daubert*, the testimony of even a sufficiently qualified expert will fail "if his methodology is questionable." *Ortiz v. United States*, 2007 U.S. Dist. LEXIS 102470 at \*4-\*5 at (D. W. Mo. Dec. 14, 2007) citing *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 153 (1999).

Here, Andrews' techniques and methodologies fail on every front. First, Plaintiffs have not shown the Court that Andrews' method of measuring ballistics damage with a caliper to determine bullet caliber is one that has been subjected to peer review and publication. Instead, Plaintiffs sidestep this requirement by arguing that "lack of 'testing,'" is an "irrelevant" factor of the *Daubert* test." p. 16. But Andrews' reliance upon a methodology that has not been subjected to testing or peer review could not be more relevant to the question of whether his techniques are scientifically reliable or junk science.

At his deposition, Andrews could not cite any particular peer-reviewed scientific articles or publications that espouse the idea that measuring ballistics damage with a caliper is an accurate method, regardless of the type of substrate, to determine the caliber of bullet causing the damage. Rather, Andrews' testimony was essentially that he designed his own methodology based upon his "collective knowledge" about ballistics, science and the "laws of physics" that he has gleaned from his review of "thousands of scientific articles." Doc. 136-5, p. 158-59, 265. Under *Daubert*, this is not enough. In the absence of any indication that his techniques have been tested by third parties and found to be reliable, the Court should reject Plaintiffs' self-serving

claim that simply holding a caliper up to or inside bullet holes in various substrates is an accurate and reliable methodology for determining caliber. Rather, *Daubert* requires that a particular technique, if it can be, be subjected to testing and peer review. Given Plaintiffs' claim that a City evidence technician could easily replicate Andrews' methodology (Doc. 153-1, p. 16), Plaintiffs also ought to be able to show the Court that Andrews' is relying upon techniques that have been well tested and subjected to peer review and publication. They have not.

The next factor for the Court to consider is the "known or potential rate of error," and whether "standards controlling the technique's operation" exist. *Kumho Tire Co.*, 526 U.S. at 149-50. Since there is absolutely no indication that Andrews' methods and techniques have been subjected to peer review or testing, it is impossible for the Court to know the potential rate of error for his methods. Plaintiffs also identify no industry standards controlling his caliber technique. Of particular concern is the fact that Andrews apparently applied the same technique to ballistics damage in at least four different types of substrates – a wooden bedroom door, a plaster framed interior wall, a hardwood floor, and a wallpapered exterior wall composed of plaster and brick. It stands to reason that ballistics damage from a bullet impacting a hardwood door would have different characteristics than damage caused from a bullet impacting a plaster wall. But Andrews' description of his techniques made clear that he made no distinctions between these different types of substrates in making his determination that there were no 7.62 x 39 caliber holes. He applied the same cookie cutter-technique to a variety of different materials. Andrews could not even identify the type of wood the bedroom door was made of.

Finally, the Court must consider whether Andrews' methods have general acceptance in the relevant scientific community. *Kumho Tire Co.*, 526 U.S. at 149-50. Plaintiffs completely fail to show, nor do they even attempt to argue, that Andrews' techniques have gained "general

acceptance” in the relevant scientific community. *Kumho Tire Co.*, 526 U.S. at 149-50. In fact, Plaintiffs fail to show that Andrews’ technique of measuring ballistics damage with a caliper is one that has received even “minimal” support within the relevant scientific community. See *Ortiz v. United States*, 2007 U.S. Dist. LEXIS 102470 \*3-\*4 citing *Daubert*, 509 U.S. at 594 (stating that a known technique “which has been able to attract only minimal support within the community” . . . may properly be viewed with skepticism.”). Here, Plaintiffs fail to show that Andrews’ technique is one with any level of acceptance or support within the field of crime scene reconstruction. To the contrary, Andrews’ technique is one he made up based upon his understanding of the “laws of physics.” Skepticism is more than warranted.

Andrews’ opinion that the 7.62 shell casings recovered from the scene could not have been fired from the AK-47 is likewise premised upon a scientifically invalid technique. In order to reach his opinion that the ten 7.62 caliber shell casings found in Hammett’s bedroom were not fired on June 7, 2017 Andrews viewed Police Department ETU photographs of the casings and concluded that he could not see “any of the normal markings of a recently fired shell.” Doc. 109-7, ¶ 13. At no point did he examine these shell casings with the aid of a microscope. Doc. 136-6, p. 333. Yet again, Plaintiffs do not even attempt to argue that Andrews’ methodology --- examining shell casings with his naked eye in an attempt to identify tool marks --- is one that has been tested and subjected to peer review or is a technique that enjoys general acceptance within the field of tool mark identification. His approach clearly has not.

For these reasons, Andrews’ techniques fail every prong of *Daubert*’s four-part test for scientific reliability. Plaintiffs have not carried their burden to show that Andrews’ opinions are based upon reliable scientific principles and techniques. Accordingly, the Court should find that Andrews’ techniques lack evidentiary reliability and trustworthiness and bar him from testifying



that no AK-47 was fired during the execution of the search warrant. *Daubert*, 509 U.S. at 590 n.9, 593-94.

**3. Andrews' opinion that no AK-47 was fired should be struck because it is based on insufficient facts and data.**

Andrews should be barred from testifying that no AK-47 was fired because he failed to sufficiently document his techniques and methodology, and as a result, his techniques are not reproducible. In their Response, Plaintiffs argue that Andrews's failure to document his analysis goes to the weight the jury may choose to give his testimony, not the admissibility of his testimony. Doc. 153-1, p. 12. While Defendants' concede that some gaps or a few minor shortcomings in documenting the shooting scene might only go to weight of Andrews' testimony, Andrews' record keeping deficiencies here are far more flagrant. His lack of notes and records documenting his work would completely hamstring anyone attempting to replicate his techniques and findings.

It is appropriate to strike expert testimony as unreliable where the purported expert has kept no record of his processes and procedures. In *Rembrandt Vision Techs., L.P. v. Johnson & Johnson Vision Care, Inc.*, the court found an expert's methodology unreliable because he failed to keep proper records and documentation of his procedures. 282 F.R.D. 655, 667 (M.D. Fla. 2012), *aff'd* 725 F.3d 1377 (11th Cir. 2013). In that patent infringement action, the plaintiff's designated a doctor to testify regarding the "hardness" of contact lenses produced by the defendant. *Id.* at 657. At trial, the doctor admitted that he relied upon an entirely different testing regimen than his laboratory records and expert report had described. *Id.* at 667, n. 14. Thus, the court found that the doctor had "failed to document and disclose the procedures he used to conduct tests." *Id.* Noting that "reproducible testing is a hallmark of reliable science," the Court

found the doctor's methodology not scientifically reliable. *Id.* quoting *Daubert*, 509 U.S. at 593. Because the doctor's testing procedures are undocumented and do not conform to the governing scientific standards, the Court stated it would be abdicating its gatekeeping role if it allowed the jury to rely on the doctor's opinion. *Id.*

Similarly, here, Andrews retained no notes from his site inspections and did not personally document his findings. Doc. 136-6, p. 298. For example, he did not document any exit and entry holes "by location or by number." *Id.* at p. 289. He did not document how many total bullet holes he observed at the scene. *Id.* at pp. 297-98. At his deposition, Andrews was unable to testify if the bullet holes on the exterior bedroom wall were entry or exit holes because, he said, he could not make that determination without "physically being at the location and being able to see both sides of the wall." *Id.* at p. 290. And yet, Andrews relied solely on his memory of his visits to 5414 Kingshighway in forming the opinions included in his Report. Doc. 136-6, p. 300.

Despite the fact that Andrews could not even verbally detail his findings and observations at his deposition, Plaintiffs argue that Defendants' assertion that Andrews' work is incapable of replication due to his lack of documentation is "baseless." Doc. 153-1, p. 16. Plaintiffs argue that the City's evidence technician "could have easily employed these same methods with these tools if they wished to test Mr. Andrews' findings." *Id.* While Defendants concede that virtually anyone is indeed capable of holding a caliper up to something and measuring the distance between two points, here, Andrews created no notes or documentation of the measurements he took that would permit another individual to replicate his work. Andrews did not create any records documenting which bullet holes are entry holes. He did not record his measurements. Photographs of the scene illustrate that the ballistics damage at issue is mainly in the form of large irregular chunks missing from the wall. See Exhibits I-L. Given the irregular shapes of the

damage, Andrews' exact placement of the caliper would be a salient fact for someone attempting to replicate or analyze his findings.

In response, Plaintiffs claim that they have produced "photographs of Mr. Andrews using the caliper at the scene" and that "Mr. Andrews testified that videos and photographs were taken the day after the shooting, when he conducted his first inspection at the residence and those photos and video have been provided to Defendants." 153-1p. 13. However, the photos and videos to which Plaintiffs refer are completely inadequate to document each of Andrews' measurements or the details of his methodology.

First, contrary to Andrews' testimony, the photos and videos purportedly taken the day after the shooting<sup>2</sup> when he purportedly "conducted his first inspection at the residence" do not contain a single image depicting Andrews' using a caliber to take measurements or a laser to determine bullet trajectories. Next, with regard to the photographs of Andrews "using the caliper at the scene" that were taken by Plaintiff's counsel on Feb. 19, 2019, these photos depict Andrews measuring only a small fraction of more than at least 50 sections of ballistics damage in the walls of the home. See Exhibit Group M. In total, Plaintiffs provided photographs of Andrews' measuring some ballistics damage to the floor and only *four* sections of ballistics damage on the walls<sup>3</sup>. Moreover, Andrews has no records to document the location of the particular bullet hole to which these photographs correspond. Doc. p. 136-5, p. 297-98; Doc.

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<sup>2</sup> Plaintiff did not produce to Defendants video recordings of Andrews' first visit to 5414 Kingshighway until October 7, 2020, one month after Defendants had taken the second day of Mr. Andrews' deposition.

<sup>3</sup> Pages 17-19 of Exhibit Group M depict Andrews measuring a single section of ballistics damage on Hammett's exterior bedroom wall. Pages 20-22 of Exhibit Group M depict Andrews measuring a section of ballistics damage on the south exterior living room wall. Pages 23-26 depict him measuring another section on the living room exterior wall. Pages 27-32 depict him measuring yet another section on the south living room exterior wall.

136-6, p. 289. Curiously, none of the photographs provided to Defendants document Andrews taking measurements of the ballistics damage on Decedent's interior bedroom wall, the location that many of the Individual Defendants testified was the origin of gunfire. See Exhibits K and L.

Finally, the following exchange is illustrative of Andrews' general attitude and approach toward his investigation:

Q. Did you create any kind of inventory of the photographs taken?

A. No.

Q. Why not?

A. Well, I was more interested in the evidence than inventories and lists.

Doc. 136-6, p. 295.

This testimony makes abundantly clear that Andrews could not be bothered to document his findings and that he lacks the discipline and organization that should be expected of an expert qualified under FRE 702. More generally, this testimony shows that Andrews fails to appreciate the seriousness of his role in this matter.

Given Andrews' concession that memory is imperfect (Doc. 136-6, p. 300) and his failure to document his observations, techniques and methodologies, this Court should find that Andrews' opinion that "[t]here are no bullet hole entries in the home that match a 7.62 caliber gun" is not based on sufficient facts and data and bar him from providing this testimony at trial.

**4. This Court should strike Andrews' opinions with regard to his interpretation of the cell phone video because he is unqualified to perform a forensic analysis of an audio recording taken on a cellular phone and because his technique is unreliable.**

In their Memorandum in Opposition, Plaintiffs argue that Andrews employed a technique or specialized skill not available to jurors when he listened to the cell phone recording because

he listened to it on “a studio monitor” and also on “different headphones” and then “enhanced” the recording, “by slowing it down and raising the volume.” Doc. 153-1, p. 17.

Essentially, Plaintiffs assert that Andrews used a high-end speaker and headphones to listen to the video recording. Having access to a studio monitor, however, does not mean that Andrews employed specialized skill, knowledge or technique. To the contrary, this method could be employed by virtually any layperson with the same equipment and therefore does not involve any specialized skill, knowledge or experience. At the end of the day, Andrews relied upon his ears – and his ears alone – in rendering his interpretation of the cell phone video recording. Any juror could do the same.

To the extent that Plaintiffs argue that Andrews’ specialized skill is simply that he has heard the sound of AK-47 type weapons fired before, it does not follow that he has the foundation to render scientifically reliable opinions with regard to gunshots depicted in a cell phone video recording. Here, the cell phone recording at issue was taken from *inside a parked car several houses down from the Decedent’s residence and across two lanes of street*. See Ex. C-1 to Defendant’s Statement of Facts in Support of Defendants’ Motion for Summary Judgment. Plaintiffs fail to identify any scientific, technical, or other specialized knowledge that Andrews possessed that would give him the foundation on which to testify that the sounds depicted on that cell phone recording are not subject to distortion from reverberations in the environment or the sound of overlapping gunfire. There is nothing in Andrews’ background that would equip him to perform a complex acoustic analysis of this nature. Moreover, Plaintiffs fail to show that Andrews’ technique has been tested and subjected to peer review and publication, and the Court is once again, left with no information about the potential rate of error. And most significantly, there is no indication that Andrews’ technique enjoys general acceptance within the

field of forensic acoustics. Andrews' "technique" for determining the type of weapons depicted in the cell phone video recording fails all four factors set forth in *Daubert* for scientific reliability. 509 U.S. at 589.

This Court should find that Andrews' opinions with regard to the cellphone video recording are scientifically invalid and that he is unqualified to provide testimony on this subject matter pursuant to Rule 702.

WHEREFORE, Defendants respectfully request that this honorable Court strike Andrews' affidavit (doc. 109-7) submitted in connection with Plaintiff's Response in Opposition to Defendants' Motion for Summary Judgment and bar him from testifying at trial

Respectfully submitted,

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#### **CERTIFICATE OF SERVICE**

I hereby certify that on October 27, 2020, the foregoing was electronically filed with the Clerk of the Court to be served by operation of the Court's electronic filing system on all counsel of record.

/s/ Erin K. McGowan